

IN THE CLAIMS:

1. (Currently Amended) A method ~~for generating a~~
~~real time vertically and horizontally downscaled video~~
~~signal (20) of a video image (11) by an image generating~~
~~and processing block (12), comprising the steps of:~~

generating (30) a real-time video signal of the video
image (11) by a camera sensor (14) of the image generating
and processing block (12),

generating (32) ~~a~~ real-time horizontally downscaled
video signal (18) ~~using horizontal downscaling of the real-~~
time video signal by the camera sensor (14) without using a
line memory, and

generating (38) ~~the~~ real-time vertically and
horizontally downscaled video signal (20) ~~using vertical~~
downscaling of the real-time horizontally downscaled video
signal (18) by a processing block (16) of the image
generating and processing block (12).

2. (Currently Amended) The method of claim 1, before
~~the step of~~ said generating (38) ~~a~~ the real-time
vertically and horizontally downscaled video signal (20),
further comprising the step of:

providing (36) ~~said~~ real-time horizontally downscaled
video signal (18) ~~from the camera sensor (14) to the~~
processing block (16) ~~through a camera compact port (CCP)~~
bus (15) of the image generating and processing block (12).

3. (Currently Amended) The method of claim 1, wherein
the camera sensor (14) ~~has a camera memory (14a).~~

4. (Currently Amended) The method of claim 1, wherein the processing block ~~(16)~~ has a processing memory ~~(16a)~~.

5. (Currently Amended) The method of claim 1, further comprising ~~the step of~~:

providing ~~(40)~~ the real-time vertically and horizontally downsampled video signal ~~(20)~~ indicative of the video image ~~(11)~~ through an internal bus ~~(25a)~~ to a real-time viewfinder display ~~(22)~~ and displaying said video image ~~(11)~~ on the real-time viewfinder display ~~(22)~~.

6. (Currently Amended) The method of claim 5, wherein the image generating and processing block ~~(12)~~ is a part of a camera-phone mobile device ~~(10)~~.

7. (Original) The method of claim 6, wherein the processing block ~~(16)~~ is a base band ~~(BB)~~ engine of the camera-phone mobile device ~~(10)~~.

8. (Currently Amended) The method of claim 6, further comprising ~~the steps of~~:

encoding ~~(42)~~ the real-time vertically and horizontally downsampled video signal ~~(20)~~ by a video packing block ~~(24)~~ of the image generating and processing block ~~(12)~~, ~~thus~~ for generating an encoded video signal ~~(27)~~, and

providing said encoded video signal ~~(27)~~ through a further internal bus ~~(27a, 27b, 27c)~~ optionally to at

least one of: a file/stream block ~~(28)~~ and ~~to a phone~~
memory ~~(28a)~~ of the camera-phone mobile device ~~(10)~~.

9. (Currently Amended) The method of claim 1,
further comprising ~~the step of:~~

encoding ~~(42)~~ the vertically and horizontally
downscaled video signal ~~(20)~~ by a video packing block ~~(24)~~
of the image generating and processing block ~~(12)~~, ~~thus~~
for generating an encoded video signal ~~(26)~~.

10. (Currently Amended) An image generating and
processing block ~~(12)~~, comprising:

a camera sensor ~~(14)~~, responsive to a video image
~~(11)~~, for generating configured to generate a real-time
video signal of the video image ~~(11)~~ and ~~for further~~
configured to generate ~~generating~~ a real-time horizontally
downscaled video signal ~~(18)~~ using horizontal downscaling
of the real-time video signal without using a line memory
~~by the camera sensor (14); and~~

a processing block ~~(16)~~, responsive to the real-time
horizontally downscaled video signal ~~(18)~~, configured to
generate ~~for generating~~ a real-time vertically and
horizontally downscaled video signal ~~(20)~~ using vertical
downscaling of the real-time horizontally downscaled video
signal ~~(18)~~.

11. (Currently Amended) The image generating and
processing block ~~(12)~~ of claim 10, wherein the camera
sensor ~~(14)~~ has comprises a camera memory ~~(14a)~~.

12. (Currently Amended) The image generating and processing block ~~(12)~~ of claim 10, wherein the processing block ~~(16)~~ has comprises a processing memory ~~(16a)~~.

13. (Currently Amended) The image generating and processing block ~~(12)~~ of claim 10, further comprising:

a camera compact port ~~(CCP)~~ bus ~~(15)~~, responsive to the real-time horizontally downsampled video signal ~~(18)~~ from the camera sensor ~~(14)~~, ~~for providing~~ configured to provide the real-time horizontally downsampled video signal ~~(18)~~ to the processing block ~~(16)~~.

14. (Currently Amended) A camera-phone mobile device ~~(10)~~, comprising:

an image generating and processing block ~~(12)~~ configured to generate ~~for generating~~ a real-time vertically and horizontally downsampled video signal ~~(20)~~ of a video image ~~(11)~~, and configured to encode ~~for encoding~~ said real-time vertically and horizontally downsampled video signal ~~(20)~~ thus for generating an encoded video signal, wherein said real-time vertically and horizontally downsampled video signal is horizontally downsampled first without using a line memory ~~(27)~~; and

a real-time viewfinder display ~~(22)~~, responsive to the real-time vertically and horizontally downsampled video signal ~~(20)~~, configured to provide ~~for providing~~ a display of the video image ~~(11)~~ indicative by said real-time vertically and horizontally downsampled video signal ~~(20)~~.

15. (Currently Amended) A camera-phone mobile device ~~(10)~~ of claim 14, further comprising:

a file/stream block ~~(28)~~, responsive to the encoded signal ~~(27b, 27e)~~, configured to provide for providing a call connection ~~(28b)~~ to other mobile devices; and

a phone memory ~~(28a)~~, responsive to the encoded signal ~~(27a)~~, configured to provide for providing the encoded signal ~~(27)~~.

16. (Currently Amended) A camera-phone mobile device ~~(10)~~ of claim 14, wherein the image generating and processing block ~~(12)~~, comprising comprises:

a camera sensor ~~(14)~~, responsive to the video image ~~(11)~~, configured to generate for generating the real-time video signal of the video image ~~(11)~~ and for further configured to generate generating a real-time horizontally downsampled video signal ~~(18)~~ using horizontal downscaling of the real-time video signal by the camera sensor ~~(14)~~;

a processing block ~~(16)~~, responsive to the real-time horizontally downsampled video signal ~~(18)~~, configured to generate for generating the real-time vertically and horizontally downsampled video signal ~~(20)~~ using vertical downscaling of the real-time horizontally downsampled video signal ~~(18)~~.

17. (Currently Amended) The camera-phone mobile device ~~(10)~~ of claim 16, wherein the processing block ~~(16)~~ is a base band ~~(BB)~~ engine of the camera-phone mobile device ~~(10)~~.

18. (Currently Amended) The camera-phone mobile device ~~(10)~~ of claim 16, wherein the camera sensor ~~(14)~~ has comprises a camera memory ~~(14a)~~.

19. (Currently Amended) The camera-phone mobile device ~~(10)~~ of claim 16, wherein the processing block ~~(16)~~ has comprises a processing memory ~~(16a)~~.

20. (Currently Amended) The camera-phone mobile device ~~(10)~~ of claim 16, further comprising:

a camera compact port ~~(CCP)~~ bus ~~(15)~~, responsive to the real-time horizontally downsampled video signal ~~(18)~~ from the camera sensor ~~(14)~~, configured to provide for ~~providing the~~ real-time horizontally downsampled video signal ~~(18)~~ to the processing block ~~(16)~~.